

C L A I M S

1. A coating material for making high temperature resistant sealing elements, particularly on metallic surfaces, characterised in that the coating material comprises a film-forming binding agent, a solvent for it and a high temperature resistant solid lubricant.
2. A coating material according to claim 1, characterised in that the solid lubricant is chosen from graphite, boron nitride or mixtures of these materials.
3. A coating material according to claim 1 or 2, characterised in that the solid lubricant is in particle form, particularly being granular or lamellar, and the solid lubricant particles have a mean particle size of 0.5 to 15 μm .
4. A coating material according to any of claims 1 to 3, characterised in that the binding agent is present in the coating material in a content of 50% or less by weight of the solids content.
5. A coating material according to claim 4, characterised in that the mass ratio of the solid lubricant and binding agent contents is within the 1:1 to 3:1 range.
6. A coating material according to any of claims 1 to 5, characterised in that the binding agent can be thermally decomposed above 700°C.

Sub A2
7. A coating material according to any of claims 1 to 6, characterised in that the binding agent includes a lacquer which forms an elastic film during the drying of the coating material.

8. A coating material according to any of claims 1 to 7, characterised in that the solvent content of the coating material is 30% or more by weight.

9. A coating material according to any of claims 1 to 8, characterised in that the coating material contains a proportion of an elastomer.

10. A coating material according to claim 9, characterised in that the elastomer content of the coating material is 5 to 15% by weight relative to the total contents of binding agent and solid lubricant.

Sub A3
11. Use of a coating material according to any of claims 1 to 10 for making sealing elements on surfaces of metal sheets.

12. The use according to claim 11, characterised in that the metal sheets are subsequently spot welded to make the sealing elements.

Sub A4
13. The use according to claim 11 or 12, characterised in that the binding agent is thermally decomposed.

14. A single or multi-layer metal layer seal with one or more sealing elements, which are made on one of the surfaces of one of the metal layers, from a coating material according to any of claims 1 to 10.
